Definitions

AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. AEGL-2 and AEGL-3, and AEGL-1 values as appropriate, will be developed for each of five exposure periods (10 and 30 minutes, 1 hour, 4 hours, and 8 hours) and will be distinguished by varying degrees of severity of toxic effects. It is believed that the recommended exposure levels are applicable to the general population including infants and children, and other individuals who may be susceptible. The three AEGLs have been defined as follows:

AEGL-1 is the airborne concentration, expressed as parts per million or milligrams per cubic meter (ppm or mg/m3) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

AEGL-2 is the airborne concentration (expressed as ppm or mg/m3) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL-3 is the airborne concentration (expressed as ppm or mg/m3) of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

Airborne concentrations below the AEGL-1 represent exposure levels that can produce mild and progressively increasing but transient and nondisabling odor, taste, and sensory irritation or certain asymptomatic, nonsensory effects. With increasing airborne concentrations above each AEGL, there is a progressive increase in the likelihood of occurrence and the severity of effects described for each corresponding AEGL. Although the AEGL values represent threshold levels for the general public, including susceptible subpopulations, such as infants, children, the elderly, persons with asthma, and those with other illnesses, it is recognized that individuals, subject to unique or idiosyncratic responses, could experience the effects described at concentrations below the corresponding AEGL.

Hydrogen sulfide 7783-06-4 (Final)					
ppm					
	10 min	30 min	60 min	4 hr	8 hr
AEGL 1	0.75	0.60	0.51	0.36	0.33
AEGL 2	41	32	27	20	17
AEGL 3	76	59	50	37	31

* Level of Odor Awareness = 0.01 ppm

Benzene 71-43-2 (Interim)					
ppm (12/12/06)					
	10 min	30 min	60 min	4 hr	8 hr
AEGL 1	130	73	52	18	9.0
AEGL 2	2,000*	1,100	800	400	200
AEGL 3	**	5,600*	4,000*	2,000*	990

Lower Explosive Limit (LEL) = 14,000 ppm
* = ≥10% LEL; ** = ≥50% LEL
AEGL 3 - 10 mins = ** 9,700 ppm
For values denoted as * safety considerations against the hazard(s) of explosion(s) must be taken into account.
For values denoted as ** extreme safety considerations against the hazard(s) of explosion(s) must be taken into account.

Phenol 108-95-2 (Final)					
ppm					
	10 min	30 min	60 min	4 hr	8 hr
AEGL 1	19	19	15	9.5	6.3
AEGL 2	29	29	23	15	12
AEGL 3	NR	NR	NR	NR	NR

NR = Not recommended due to insufficient data
Level of Distinct Odor Awareness (LOA) = 0.25 ppm

Ethyl benzene 100-41-4 (Interim)					
ppm (9/21/09					
	10 min	30 min	60 min	4 hr	8 hr
AEGL 1	33	33	33	33	33
AEGL 2	2900	1600	1100	660	580
AEGL 3	4700	2600	1800	1000	910

Toluene 108-88-3 (Final)					
ppm					
	10 min	30 min	60 min	4 hr	8 hr
AEGL 1	67	67	67	67	67
AEGL 2	1,400*	760	560	310	250
AEGL 3	** 10,000 ppm	5,200*	3,700*	1,800*	1,400*

Lower Explosive Limit (LEL) = 14,000 ppm
* = ≥ 10% LEL; ** = ≥ 50% LEL
AEGL 3 - 10 min = **10,000 ppm
For values denoted as * safety considerations against the hazard(s) of explosion(s) must be taken into

account.
For values denoted as ** extreme safety considerations against the hazard(s) of explosion(s) must be taken into account.

Xylenes 1330-20-7 (Final)					
ppm					
	10 min	30 min	60 min	4 hr	8 hr
AEGL 1	130	130	130	130	130
AEGL 2	2,500*	1,300*	920*	500	400
AEGL 3	**	3,600*	2,500*	1,300*	1,000*

Lower Explosive Limit (LEL) = 9,000 ppm
* = ≥10% LEL
** = ≥50% LEL
AEGL 3 - 10 min = ** 7,200 ppm
For values denoted as * safety considerations against the hazard(s) of explosion(s) must be taken into account.
For values denoted as ** extreme safety considerations against the hazard(s) of explosion(s) must be taken into account.